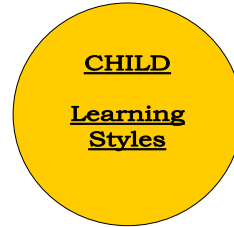


THE SYNTHESIS MODEL:

A “Unified Field Theory”
of
Differentiation for the Gifted & Talented



Presented by
Richard D. Courtright, Ph.D.
Gifted Education Research Specialist
Duke University Talent Identification Program



Dunn's, Gregorc's, Meyers-Briggs
Theories of Learning Styles

Dabrowski's Overexcitabilities

Non-Intellective Components of the Individual

- Psychomotor Modalities
- Sense Modalities
- Imaginational Modalities
- Emotional Modalities

Triarchic Theory of Intelligence

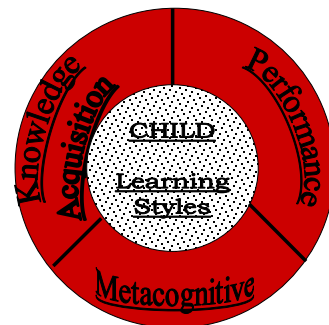
- **Componential Subtheory**
relates intelligence to the internal world of the individual.
- **Experiential Subtheory**
relates intelligence to both the external and internal worlds of the individual.
- **Contextual Subtheory**
relates intelligence to the external world of the individual.

Sternberg, 1986

Triarchic Theory of Intelligence: Componential Subtheory

- **Knowledge-Acquisition Components**
sensory processes used in gaining new knowledge.
- **Performance Components**
used in various strategies of task performance:
encoding; inference, mapping, comparison...
- **Meta-Components**
control processes that are collectively referred to as
the “executive” or metacognition functions.

Sternberg, 1986



Sternberg's Triarchic Theory of Intelligence

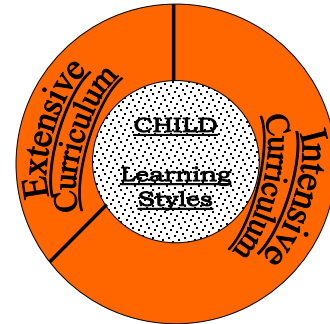
Hirsch's Cultural Literacy: The Extensive & The Intensive

• The Extensive Curriculum

The content of the extensive curriculum is the traditional, literate knowledge, the information, attitudes and assumptions that literate Americans share.

• The Intensive Curriculum

...though different, encourages a fully developed understanding of a subject, making one's knowledge of it integrated and coherent.



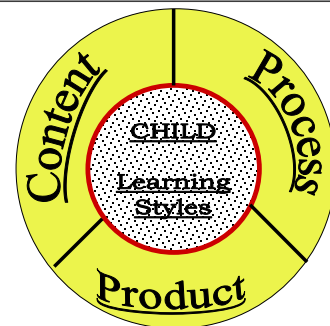
Hirsch's Model of Cultural Literacy

NS-
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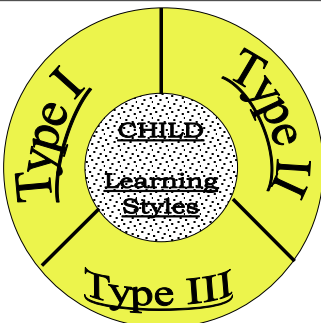
PRINCIPLES OF A DIFFERENTIATED CURRICULUM FOR THE GIFTED/TALENTED

- PRESENT CONTENT THAT IS RELATED TO BROAD-BASED KNOWLEDGE, THOUGHT, OR PROBLEM-SOLVING.
- INTEGRATE MULTIPLE DISCIPLINES INTO THE AREA OF STUDY.
- PRESENT COMPREHENSIVE, RELATED, AND AUTOMATICALLY DIFFERENTIATED CONTENT WITH AN AREA OF DEPTH.
- ALLOW THE STUDENT CHOICE IN LEARNING OF A SELF-SELECTED TOPIC WITHIN THE AREA OF STUDY.
- DEVELOP INDEPENDENT OR SELF-DIRECTED STUDY SKILLS.
- DEVELOP PROBLEM-SOLVING, ANALYTICAL, AND/OR CREATIVE SKILLS.
- FOCUS ON OPEN-ENDED TASKS.
- DEVELOP PROBLEM-SOLVING AND REASONING SKILLS.
- INTEGRATE REASONING AND HIGHER LEVEL THINKING SKILLS INTO THE CURRICULUM.
- ENCOURAGE THE DEVELOPMENT OF PRODUCTS THAT CONSIST OF REASONING AND PROBLEM-SOLVING SKILLS.
- ENCOURAGE THE DEVELOPMENT OF PRODUCTS THAT USE NEW TECHNIQUES, MATERIALS, AND FORMS.
- ENCOURAGE THE DEVELOPMENT OF SELF-UNDERSTANDING, I.E. PERSONAL AND SOCIAL, I.E. PROBLEM-SOLVING, REASONING, SELF-DIRECTED, APPROPRIATING, EVALUATING AND DIFFERENTIATING BETWEEN INDIVIDUAL AND OTHERS.
- EVALUATE STUDENT OUTCOMES BY USING APPROPRIATE AND SPECIFIC CRITERIA, INCLUDING SELF-ASSESSMENT, PEER-ASSESSMENT, AND/OR TEACHER ASSESSMENT.

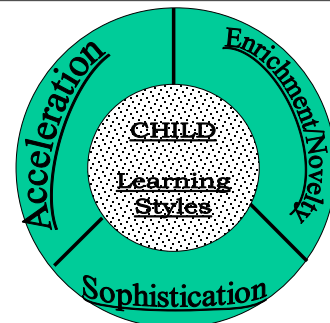
es of
tiation



Gallagher's Model of Curriculum Differentiation



Renzulli's Enrichment Triad Model



Gallagher's Model of Content Differentiation

Bloom's Taxonomy: The Cognitive Domain

- **Knowledge**
 - recall or recognition of specific information
- **Comprehension**
 - understanding of information given
- **Application**
 - using methods, concepts, principles and theories in new situations...

Bloom's Taxonomy: The Cognitive Domain

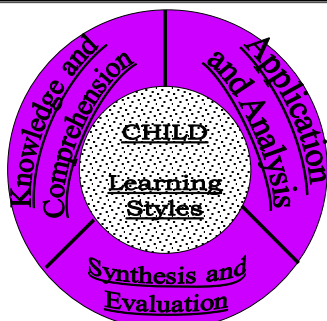
- **Analysis**
 - breaking information down into constituent elements.
- **Synthesis**
 - putting together parts to form an original whole through creative thinking.
- **Evaluation**
 - judging the worth or merit of ideas, materials and methods by applied standards and criteria.

REVISED Bloom's Taxonomy: The Knowledge Domain

- **Factual Knowledge**
 - The basic elements students must know to be acquainted with a discipline or solve problems in it.
- **Conceptual Knowledge**
 - The interrelationships among the basic elements within a larger structure that enable them to function together.

REVISED Bloom's Taxonomy: The Knowledge Domain

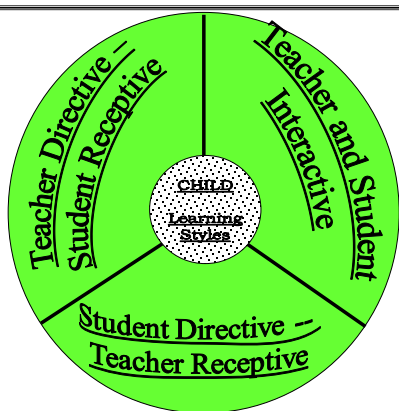
- **Procedural Knowledge**
 - How to do something, methods of inquiry, and criteria for using skills, algorithms, techniques and methods.
- **Metacognitive Knowledge**
 - Knowledge of cognition in general as well as awareness and knowledge of one's own cognition



Bloom's Taxonomy of Educational Objectives

Adler's Paideia Proposal: Three Types of Teaching

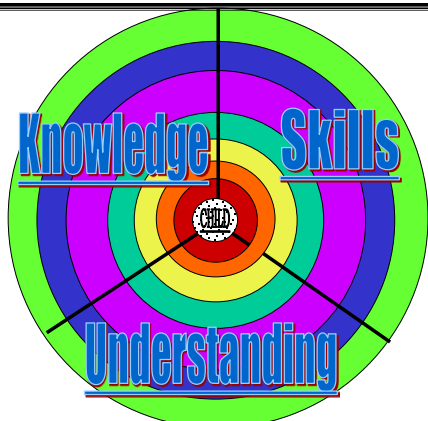
- **Didactic Instruction**
 - acquisition of organized knowledge in the areas of subject matter using textbooks and other aids
- **Coaching**
 - development of intellectual operations through supervised practice in process skills
- **Socratic (Maieutic)**
 - development of enlarged understanding of ideas and values



Wiggins & McTighe's Understanding by Design

When we truly understand, we:

- Can EXPLAIN
- Can INTERPRET
- Can APPLY
- Have PERSPECTIVE
- Can EMPATHIZE
- Have SELF-KNOWLEDGE



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